

Claims:

1. An underground storage tank comprising a synthetic resin shell having an outer wall and defining a chamber therein for the receipt and storage of liquid, the shell being generally elongated along a longitudinal axis and having a height and a width oriented at orthogonal axes generally transverse to the longitudinal axis, said outer wall including an upper wall having structure defining at least one manway for permitting entry into and egress from the tank and a lower wall, the outer wall of the shell having a plurality of inwardly extending receiving pockets, at least two of the receiving pockets being positioned in opposition to one another, each of said receiving pockets having an upright wall extending at least about 15% of the height of the shell and a second wall substantially perpendicular to the upright wall and extending at least about 15% of the width of the shell.

2. An underground storage tank as set forth in claim 1, wherein said upper wall includes a first set of said plurality of receiving pockets arranged in longitudinally spaced relationship, wherein said outer wall intermediate the receiving pockets of said first set of said plurality of receiving pockets is generally arcuate when viewed along the longitudinal axis.

3. An underground storage tank as set forth in claim 2, wherein said upper wall includes a second set of said plurality of receiving pockets positioned laterally opposite said first set of said plurality of receiving pockets.

4. An underground storage tank as set forth in claim 3, wherein said lower wall includes third set of said plurality of receiving pockets positioned substantially beneath said first set of said plurality of receiving pockets and said second set of said plurality of receiving pockets in said upper wall.

5. An underground storage tank as set forth in claim 3, wherein at least some of said first and second set of receiving pockets have their upright walls oriented in planes which intersect a plane extending substantially vertically through said longitudinal axis.

6. An underground storage tank as set forth in claim 2, wherein said lower wall includes a second set of said plurality of receiving pockets positioned substantially beneath said first set of said plurality of receiving pockets.

7. An underground storage tank as set forth in claim 6, wherein said outer wall longitudinally intermediate the receiving pockets of said second set of said plurality of receiving pockets is generally arcuate when viewed along the longitudinal axis.

8. An underground storage tank as set forth in claim 6, wherein the receiving pockets each include a pair of opposed, substantially upright side walls and an

upright inboard wall connecting the upright side walls, and a base wall extending substantially transversely to said side walls and said upright inboard wall.

9. An underground storage tank as set forth in claim 1, wherein said shell includes opposed, longitudinally spaced substantially dome-shaped end walls.

10. An underground storage tank as set forth in claim 1, wherein said end walls include at least one upright substantially flat surface extending over a majority of the height of said shell.

11. An underground storage tank as set forth in claim 1, wherein said shell includes at least one laterally projecting stabilization lug integrally formed with said outer wall, said stabilization lug including at least upright opening therethrough.

12. An underground storage tank as set forth in claim 11, wherein said stabilization lug includes a first arm extending substantially horizontally substantially parallel to said longitudinal axis and a second arm extending substantially horizontally and substantially perpendicular to said longitudinal axis.

13. An underground storage tank as set forth in claim 12, wherein said stabilization lug has a hollow interior which fluidically communicates with said chamber.

14. An underground storage tank as set forth in claim 1, wherein said upper wall includes a collar surrounding said manway and a circumscribing trough surrounding said collar, said circumscribing trough communicating with at least one of said receiving pockets for enabling liquid collected in said recess to drain into said at least one of said receiving pockets.

15. An underground storage tank as set forth in claim 1, wherein said upper wall includes an upwardly projecting lug presenting an opening transversely extending therethrough and an adjacent recess in said upper wall, whereby said recess is complementally located relative to said upwardly projecting lug to receive said lug therein when two of said storage tanks are positioned with their upper walls in adjacency.

16. An underground storage tank as set forth in claim 1, wherein said outer wall includes an upper wall which includes a first set of said receiving pockets, said shell further including a lower wall having a second set of said receiving pockets positioned substantially beneath said first set of said receiving pockets to provide superposed pairs of upper and lower receiving pockets, at least one of the receiving pockets of said first set of said receiving pockets and at least one of the receiving pockets of said second set of receiving pockets including an opening therein, and further including a tubular member integrally formed with said outer wall and extending between at least one of said superposed pairs of upper and lower receiving pockets

having said openings in the respective receiving pockets thereof, said tubular member fluidically communicating with said openings to permit the passage of liquid therethrough and to isolate the chamber from liquid passing through said tubular member.

5 17. An underground storage tank as set forth in claim 16, wherein each of said superposed pairs of receiving pockets includes openings therein and having one of said tubular members extending between said openings.

 18. An underground storage tank as set forth in claim 17, wherein said tubular member is substantially frustoconically shaped.

10 19. An underground storage tank as set forth in claim 18, wherein the openings in the receiving pockets of the first set of receiving pockets has a greater transverse dimension than the openings in the receiving pockets of the second set of receiving pockets.

 20. An underground storage tank as set forth in claim 16, wherein said tubular member includes a waist portion intermediate the openings of the receiving pockets, said openings of the receiving pockets having a first area and the waist portion of the tubular member having a second area smaller than the first area.

20 21. An underground storage tank as set forth in claim 1, wherein said shell includes a lower wall and a side wall positioned intermediate said upper wall and said lower wall, said shell further including a plurality of longitudinally spaced substantially upright ribs molded into said side wall.

 22. An underground storage tank as set forth in claim 21, wherein said ribs are defined by slots molded into said outer wall projecting inwardly into said chamber.

25 23. An underground storage tank as set forth in claim 22, wherein said slots extend from said side wall into said upper wall and said lower wall.

 24. An underground storage tank as set forth in claim 23, wherein at least one of said slots is positioned to communicate with one of said receiving pockets.

30 25. An underground storage tank as set forth in claim 24, wherein said upper wall includes a first set of said plurality of receiving pockets arranged in longitudinally spaced relationship and said outer wall intermediate the receiving pockets of said first set of said plurality of receiving pockets is generally arcuate when viewed along the longitudinal axis, wherein said lower wall includes a second set of said plurality of receiving pockets positioned substantially beneath said first set of said plurality of receiving pockets, and wherein at least some of said slots communicate
35 between respective receiving pockets in said first set and said second set.

26. An underground storage tank as set forth in claim 25, wherein additional slots are positioned in said outer wall intermediate the receiving pockets of said first set of receiving pockets.

27. An underground storage tank as set forth in claim 1, wherein said upper wall includes a first set of said plurality of receiving pockets arranged in longitudinally spaced relationship, wherein said outer wall intermediate the receiving pockets of said first set of said plurality of receiving pockets is generally arcuate when viewed along the longitudinal axis said upper wall includes a second set of said plurality of receiving pockets positioned laterally opposite said first set of said plurality of receiving pockets, and further including at least one transverse rib extending across said upper wall and between respective ones of said first set of receiving pockets and said second set of receiving pockets.

28. An underground storage tank as set forth in claim 27, wherein said transverse rib is formed by a slot molded into said upper wall.

29. An underground storage tank as set forth in claim 1, wherein said outer wall includes an upper wall which includes a first set of said receiving pockets, said shell further including a lower wall having a second set of said receiving pockets positioned substantially beneath said first set of said receiving pockets to provide superposed pairs of upper and lower receiving pockets, at least one of the receiving pockets of said first set of said receiving pockets and at least one of the receiving pockets of said second set of receiving pocket forming an opposing superposed pair having a reinforcement mount wherein said reinforcement mounts of said opposing superposed pair are oriented in opposition to one another, and further including a reinforcement member constructed separately from said shell and mounted on said reinforcement mounts between said opposing superposed pair.

30. An underground storage tank as set forth in claim 29, wherein said reinforcement member is tubular.

31. An underground storage tank as set forth in claim 30, wherein said reinforcement includes at least one perforation therein for permitting liquid to flow into and from the reinforcement.

32. An underground storage tank as set forth in claim 29, wherein said superposed pairs of receiving pockets are longitudinally spaced from one another.

33. An underground storage tank as set forth in claim 29, wherein superposed pairs of receiving pockets are positioned on both sides of an upright plane passing through the longitudinal axis of the tank.

34. An underground storage tank as set forth in claim 29, wherein the reinforcement mount is molded into the receiving pockets.

35. An underground storage tank as set forth in claim 29, wherein the manway includes a collar extending upwardly from a circumscribing trough recessed inwardly and below the upper wall.

36. An underground storage tank as set forth in claim 35, wherein the collar includes recesses for receiving a cover thereon in locking engagement.

37. An underground storage tank as set forth in claim 36, including a cover received on the manway.

38. An underground storage tank as set forth in claim 8, wherein said base wall is substantially imperforate and wherein said upright side walls and said upright inboard walls of said receiving pockets have a vertical extension such that the base walls of a respective pair of substantially vertically aligned pockets meet at a junction therebetween.

39. An underground storage tank as set forth in claim 38, wherein said junction between said base walls of said receiving pockets is a molded connection.

40. An underground storage tank comprising:
a shell having an outer wall, the outer wall including an upper side having a top surface, the outer wall defining a chamber therein;
at least one manway leading into the chamber, the manway including a collar adapted for receiving a cover thereon and a circumscribing trough recessed downwardly from the collar and the top surface of the outer wall.

41. An underground storage tank as set forth in claim 40, wherein the shell includes a plurality of receiving pockets recessed inwardly into the chamber, at least one of the receiving pockets including an upright wall positioned adjacent to the trough of the manway whereby liquid collected in the manway may drain into the receiving pocket.

42. An underground storage tank as set forth in claim 41, wherein the shell includes an arcuate, upright shoulder wall extending downwardly to the trough from the top surface.

43. An underground storage tank as set forth in claim 42, wherein the shell includes a pair of longitudinally spaced, dome-shaped ends, each of the ends having an upright panel wall extending downwardly to the trough and positioned opposite the arcuate, upright shoulder wall.

44. An underground storage tank as set forth in claim 40, including a reinforcement mount integrally molded into each of said receiving pockets, and a reinforcement mounted on each of said reinforcement mounts within the chamber which extends between respective pockets.

45. An underground storage tank comprising a shell molded of synthetic resin material and having an outer wall defining therein a chamber, said shell including a pair of longitudinally spaced ends and at least 1 L-shaped lug molded into the outer wall at each of said ends presenting an upright opening between said lug and said shell.

46. An underground storage tank as set forth in claim 45, wherein said shell includes a vertically extending groove molded therein and positioned interiorly of said L-shaped lug.

47. An underground storage tank as set forth in claim 45, wherein said shell is elongated and includes two longitudinally spaced substantially dome-shaped ends each having at least one flat surface thereon substantially aligned along an upright plane passing through a longitudinal axis of the shell, and including a plurality of said L-shaped lugs positioned to extend from each of said substantially dome-shaped ends.